

United States Patent and Trademark Office

cen

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,501	01/11/2005	Thomas C. O'Brien	CL2332USPCT 9237	
7590 08/21/2007 Barbara C Siegell E I du Pont de Nemours & Company Legal Patents Wilmington, DE 19898			EXAMINER CRANSON JR, JAMES W	
			ART UNIT	PAPER NUMBER
			2875	
			MAIL DATE	DELIVERY MODE
			08/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Summary	10/521,501	O'BRIEN ET AL.			
omoc Addon Gammary	Examiner	Art Unit			
The MAII ING DATE of this communication and	James W. Cranson	2875			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status		•			
1) Responsive to communication(s) filed on <u>11 January 2005</u> .					
·—					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-15 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	wn from consideration.				
Application Papers					
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 11 January 2005 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate			

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,122,939 to Kazdan et al

Re claim 1:

A laminated polymer (A polymer being laminated is not germane to the issue of patentability of the device itself. Therefore, the "laminated" limitation has not been given any patentable weight. Further, a preamble is generally not given any patentable weight.) comprised of at least two layers of transparent polymer (20, retroreflector, 50 lens, column 2 lines 34,35, "retroreflector may be produced from any transparent solid") with adjacent polymer layers separated by a transparent solid non-glass interlayer or an air cavity, wherein at least one said transparent non-glass interlayer or said air cavity contains a device (column 3, lines 49-51 lamp is mounted immediately in front of the retroreflector") comprised of at least one element selected from the group consisting of solid state lighting(12), heat sensors, light sensors, pressure sensors, thin, heat sensors, light sensors, pressure sensors, thin film batteries, liquid crystal display films, suspended particle device films, and transparent electrical conductors.

Re claim 3, according to claim 1:

Application/Control Number: 10/521,501

Art Unit: 2875

Kazdan discloses that the element is comprised of solid-state lighting (12).

Re claim 4, according to claim 3:

Kazdan discloses that the solid-state lighting is in the form of at least one LED (12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,122,939 to Kazdan.

Kazdan discloses the claimed invention except for the plastic housing 30 that comprises layer one being transparent with (20) as transparent solid non-glass interlayer and (50) that comprises layer two.

It would have been obvious to one of ordinary skill in the art at the time of the invention to change the plastic material of housing of Kazdan to a transparent plastic material since it has

been held that lacking any criticality, the selection of known material based on its suitability for the intended use for prior art parts does not make the claimed invention patentable over that prior art (*In re Leshin*, 125 USPQ 416). The reason for making the housing transparent is to increase the amount of illumination. The increase in illumination makes the nighttime warning marker of Kazdan more safe.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,122,939 to Kazdan in view of USPN 7,111,955 to Tsai et al.

Kazdan does not disclose the use of an organic light emitting diode or an electroluminescent film.

Tsai in an illuminated logo unit with reflective film teaches using an organic light emitting diode and/or an electroluminescent film in claim 8.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Tsai and provide an organic light emitting diode and/or an electroluminescent film in the lighting unit of Kazdan. The reason for using OLEDs is that OLEDs emit and reflect light. The reason for using an EL film is to make the device thinner.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,122,939 to Kazdan in view of USPN 5,894,194 to Lu et al.

Kazdan does not disclose the use of transparent electrical conductors or that transparent electrical conductors are indium tin oxide.

Lu in an invisible spacers for field emission displays teaches using transparent electrical conductors that are indium tin oxide.

Page 5

Art Unit: 2875

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Lu and provide transparent electrical conductors are indium tin oxide in the lighting unit of Kazdan. The reason for using transparent electrical conductors is that the transparent electrical conductors will be invisible to the human eye (ABSTRACT).

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,122,939 to Kazdan in view of USPN 6,982,649 to Blum et al.

Kazdan does not disclose the use of a microprocessor chip programmed to cause solidstate lighting to display images and/or text.

Blum in a floor display system with interactive features teaches the use of microprocessor chip to wit "In other embodiments, cards known as microprocessor cards could be used to provide individual identification for purposes of customized displays. Microprocessor cards contain a microprocessor chip that can add, delete, change, and update information. A microprocessor card may further comprise an input/output port, operating system and hard disk, and is thus viewed by many as essentially a miniature computer." programmed to cause solid-state lighting to display images and/or text.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Blum and provide a microprocessor chip programmed to cause solid-state lighting to display images and/or text in the lighting unit of Kazdan.

The reason for using a microprocessor chip is to selectively vary the illumination.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,122,939 to Kazdan.

Re claim 13, according to claim 3:

Kazdan discloses the claimed invention except for polymer being flexible and adapted to various shapes and forms.

It would have been obvious to one of ordinary skill in the art at the time of the invention to change the form or shape of Kazdan since it has been held that lacking any criticality, changing the form or shape of prior art parts does not make the claimed invention patentable over that prior art (*In re Dailey*, 149 USPQ 47).

Re claim 14, according to claim 13;

Kazdan as modified above for claim 13 has that solid-state device is LED.

Re claim 15, according to claim 13,

Kazdan as modified above for claim 13, and in further view of USPN 7,111,955, has that solid-state device is OLED.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is USPN 7,178,279 to Molvidson et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Cranson whose telephone number is 571-272-2368. The examiner can normally be reached on Mon-Fri 8:30A.M.- 5:00P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/521,501 Page 7

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ĮWC 8/15/07

> Supervisory Patent Examiner Technology Center 2800